

## Patent Abstracts of Japan

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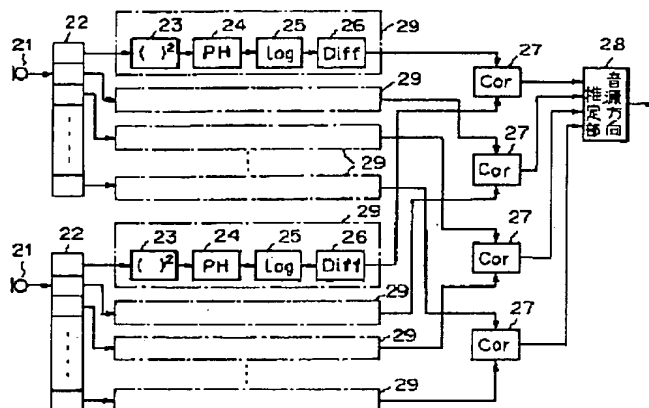
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TITLE : PREDICTING METHOD OF DIRECTION  
OF SOUND SOURCE



ABSTRACT : PURPOSE: To correctly predict the direction of a sound source even in the sound field where many reflecting sounds are present.

CONSTITUTION: Outputs from two microphones 21, 21 are respectively divided to M frequency bands by a band splitting part 22. The power of the signals in each band is detected in a power operating part 23. The peak value of the signals is held by a peak hold part 24, logarithmically processed by a logarithmic processing part 25, and differentiated by a time difference processing part 26. The function of correlation between the signals in the corresponding frequency bands of the outputs of the microphones processed in the same manner is obtained in a correlation function operating part 27. The function of correlation in each frequency band is weighted and averaged in a sound source direction predicting part 28 thereby to obtain a weighted mean. The maximum weighted mean is regarded as the time difference of the direct sounds reaching the microphones 21, 21, whereby the direction of the sound source is operated.

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